

Claims

1. Drive for adjusting seats, particularly for vehicles having spindle (5) that is attached to first (4) of two rails (3, 4) that are adjustable relative to one another by means of support device (60) located on at least one end of spindle (5), and having gear mechanism (9) driven by motor (2), which is arranged on second rail (3),
characterized by at least one support device (60) having trough-shaped outer support surface (66) in which one end of spindle (5) is seated in a fixed manner.
2. Drive according to claim 1,
characterized by two such support devices (60) being provided, whereby one of such support devices (60) serves to hold one of two ends (5a) of spindle (5) in each instance.
3. Drive according to claim 1 or 2,
characterized by spindle (5) being attached on trough-shaped support surface (66) by means of laser welding.
4. Drive according to claim 3,
characterized by spindle (5) being attached on the border area of trough-shaped support surface (66) by means of two weld seams (74, 75) that run parallel to spindle axis (A).

5. Drive according to claim 4,
characterized by each of weld seams (74, 75) being not less than
approximately 10 mm long.
6. Drive according to one of claims 1-5,
characterized by spindle (5) being produced from rolled round
steel.
7. Drive according to one of claims 1-6,
characterized by ends (5a) of spindle (5) being lathed and having
a diameter (\emptyset) that is smaller than the root circle of the thread
of spindle (5).
8. Drive according to claim 7,
characterized by the ends of spindle (5) having a diameter not
smaller than 6 mm.
9. Drive according to one of claims 1-8,
characterized by each support device (60) being shaped in an L-
shaped manner and having plate-shaped horizontal shank (61) and
solid, block-like vertical shank (62) on top of which trough-
shaped support surface (63) is formed.
10. Drive according to claim 9,
characterized by trough-shaped support surface (63) running
parallel to horizontal shank (61).

11. Drive according to claim 9 or 10,
characterized by horizontal shank (61) having attachment hole
(64) so that it can be attached to the vehicle floor.
12. Drive according to one of claims 9-11,
characterized by horizontal shank (61) having width (D) that is
approximately as wide as the inner distance (ID) of first rail
(4), which is U-shaped in its cross section.
13. Drive according to one of claims 9-12,
characterized by vertical shank (62) having lesser width (d) seen
in a top view as compared with width (D) of horizontal shank
(61).
14. Drive according to one of claims 9-13,
characterized by vertical shank (62) being provided with
reinforcement bands (67) formed on in one piece on the border
side at the inner transition area to horizontal shank (61).
15. Drive according to one of claims 1-14,
characterized by support device (60) having no less than one
projecting cam (70, 71) on its lower support surface for engaging
into corresponding opening (4a) of first rail (4).
16. Drive according to claim 15,
characterized by two cams (70, 71) being provided that are spaced
apart from one another when seen in the longitudinal axis to
spindle (5).

17. Drive according to claim 11 and 16,
characterized by a first one of two cams (70) being arranged between attachment hole (64) and front, free edge (68) of horizontal shank (61), and second cam (71) being arranged in the area of solid block-like vertical shank (62).
18. Drive according to claim 17,
characterized by first cam (70) having lesser diameter (x) and projecting further out of the plane of support surface (63) of horizontal shank (61) than second cam (71).
19. Drive according to claims 15-18,
characterized by each cam (70, 71) having a lesser diameter than attachment hole (64).
20. Drive according to claims 9-19,
characterized by solid, block-like vertical shank (62) of support device (60) having outer stop surface (65) for gear mechanism (9) that can move on spindle (5), which surface runs orthogonally to horizontal shank (61).
21. Drive according to claims 1-20,
characterized by support device (60) being formed as a cold-extruded part made of metal.
22. Drive according to claim 21,
characterized by the cold-extruded part predominantly consisting of steel.

23. Drive according tone of claims 1 to 22,
characterized by spindle (5) that is seated firmly on support device(s) (60) forming a pre-assembled module together with lower rail (4) and upper rail (3).
24. Drive according tone of claims 1 to 23,
characterized by lower rail (4) being releasably connected with support device(s) (60).
25. Drive according to claim 24,
characterized by lower rail (4) and support devices (60) being connected with one another in a form-fit manner.
